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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,851	04/10/2000	Yasuyuki Sonoda	2406-5	3157
22204	7590	12/29/2004	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			HOYE, MICHAEL W	
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			2614	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/545,851	SONODA ET AL.
	Examiner	Art Unit
	Michael W. Hoye	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 September 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 38-61,70 and 71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 38-61,70 and 71 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 September 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/7/04.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION***Response to Arguments***

1. Applicants' arguments filed on 9/22/04, with respect to claims 40, 41, 48-50, 52, and 56-58, have been fully considered but they are not persuasive.

As to amended independent claim 40, the Applicants argue that, "While Richards et al may disclose a device similar to that of Applicant's claimed invention, it clearly fails to disclose or suggest receipt of determining data for determining initial transmission scheduling time and retrial information transmitted by the broadcast station at the same time."

In response, the Examiner respectfully disagrees with the Applicants because the Richards et al reference clearly discloses the claimed, "wherein upon receipt determining data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time...", as met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 (see col. 5, lines 42-48 and col. 6, lines 43-53).

Regarding amended independent claim 56, the Applicants make similar arguments as in claim 40 above and the Examiner respectfully disagrees with the Applicants for same reasons as noted above.

Applicants' arguments with respect to claims 38, 39, 54, 55 and 61 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 38-41, 48-50, 52, 54-58 and 70-71 are rejected under 35 U.S.C. 102(e) as being anticipated by Richards et al (USPN 6,237,146), cited by the Examiner.

As to claims 38-39, the claims are rejected based on similar grounds as the rejection of claims 40 and 56, as described below.

As to claim 40, note the Richards et al reference which discloses a television receiver 30 (col. 3, lines 8-9). The claimed displaying images in response to receipt of data transmitted by a broadcasting device is met by the Digital Video Home Terminals (DHVT 14) as shown in Fig. 1, which are connected to a television set 30 for displaying images that were transmitted from the Administration and Maintenance Interface (AMI) 23 (col. 3, lines 5-19). The claimed transmitting response information to response information receiving equipment via a communication line is met by the DHVT 14, which may uplink information over communication line 18/22 to the AMI 22 as shown in Fig. 1 (see col. 2, lines 51-65 and col. 3, lines 5-19). The claimed, “wherein upon receipt determining data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time”, is met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 to

the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 (see col. 5, lines 42-48 and col. 6, lines 43-53). The DHVT also retransmits said response information to the "response information receiving equipment" or AMI 23 when communication between the television receiver and the response information receiving equipment is unsuccessful (see col. 5, line 36 – col. 6, line 53). In col. 5, line 36 – col. 6, line 53 of the Richards et al reference, the "receiver" or DHVT 14 (set-top box) receives the claimed "retrial information [or data] contained in the broadcast data for re-transmitting response information in case of unsuccessful transmission of the response information" from the Administration and Maintenance Interface (AMI 23), which sends to the DHVT a particular back-off array used for controlling the DHVT's attempts and reattempts in successfully sending messages without collision with other messages from other subscribers using the communication line (18, 20, 22, see Fig. 1 and col. 2, lines 51-65).

As to claim 41, the Richards et al reference further discloses that the initial transmission scheduling times with said response information receiving equipment are specified after being randomly generated based on received delay information from the AMI 23 (see col. 5, line 35 – col. 6, line 60 and col. 7, lines 2-25).

As to claim 48, the Richards et al reference discloses the claimed television and data receiver as described above in claim 4. Richards further discloses that the type of messages may involve Pay-per-view matters (col. 5, lines 28-35). Although, the Richards et al reference does not specifically disclose that the time remaining for transmission is computed from a transmission end time sent from said broadcast unit, and said retrial transmission conditions are

altered according to said time remaining for transmission. For example, it is inherent that there is only a limited time that a user may purchase and view a pay-per-view event, therefore, there would only be a certain amount of time remaining for transmission which is determined by a transmission end time that would be sent from the broadcast unit and whereby the retrial conditions would be altered according to the remaining time left for transmission.

As to claim 49, the Richards et al reference further discloses the claimed notification data that is generated for making notification of the results of communications with the response information receiving equipment as met by acknowledgement or other information that is sent back to the DVHT 14 from the AMI 23 (see col. 7, lines 9-12).

As to claim 50, the Richards et al reference discloses that the claimed communication results are received from the response information receiving equipment or AMI 23 and notification data is generated as described above in claim 15.

As to claim 52, the Richards et al reference further discloses storing or memory means for storing said response information to be transmitted after a delay as shown by RAM 40 in Fig. 2, and the claimed notification means is met by the DVHT 14, which includes the “boot” program 43 contained in ROM 42, the randomized array in RAM 40, and the CPU 38, which operate to transmit a message and the AMI 23 sends an acknowledgement back if the message is received (see col. 5, lines 35-54 and col. 7, lines 2-25).

As to claims 54-55, the claims are rejected based on similar grounds as described in the rejection of claims 40 and 56.

As to claim 56, note the Richards et al reference which discloses a data receiving device. The claimed means for receiving data sent from a broadcasting device is met by the Digital

Video Home Terminals (DHVT 14) as shown in Fig. 1. The claimed communication means for transmitting response information via a communication line is also met by the DHVT 14, which may uplink information over communication line 18/22 to the AMI 22 as shown in Fig. 1 (see col. 2, lines 51-65 and col. 3, lines 5-19). The claimed, “wherein said receiving means determines data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time”, is met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT’s attempts and reattempts in sending messages to the AMI 23 (see col. 5, lines 42-48 and col. 6, lines 43-53). The DHVT or “communication means” also retransmits said response information to the “response information receiving equipment” or AMI 23 when communication between the television receiver and the response information receiving equipment is unsuccessful (see col. 5, line 36 – col. 6, line 53). In col. 5, line 36 – col. 6, line 53 of the Richards et al reference, the “receiver” or DHVT 14 (set-top box) receives the retrial information, or data contained in the broadcast data used for retransmitting said response information according to said retrial information when communication with said response information receiving equipment is unsuccessful, from the Administration and Maintenance Interface (AMI 23), which sends to the DHVT a particular back-off array used for controlling the DHVT’s attempts and reattempts in successfully sending messages without collision with other messages from other subscribers using the communication line (18, 20, 22, see Fig. 1 and col. 2, lines 51-65).

As to claim 57, Richards et al further discloses the claimed retrial time specifying data computation means... as met by the retry algorithms (see col. 5, line 57 – col. 6, line 59 and col.

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7, lines 12-32), and the claimed transmission means for retransmitting said stored response information when said retrial time is reached is also met by the DHVT (see col. 6, lines 43-60 & col. 7, lines 12-32).

As to claim 58, Richards further discloses that the initial transmission scheduling times with said response information receiving equipment are specified after being randomly generated based on received delay information (see col. 5, line 49 – col. 6, line 60).

As to claim 70, the Richards et al reference discloses a data transceiving method for receiving data from a broadcast device and sending response information via a communication line to response information receiving equipment. The claimed transmitting data for determining initial transmission scheduling time and retrial information transmitted at the same time from said broadcasting device, determining initial transmission scheduling time based on said data for determining initial transmission scheduling time, sending said response information to said response information receiving equipment at said initial transmission scheduling time, and re-transmitting said response information to said response information receiving equipment based on said retrial information received concurrently with said data for determining initial transmission scheduling time, when communication between said television receiver and said response information receiving equipment is unsuccessful is met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 or communication line 18/22 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 (see Fig. 1 & col. 5, lines 42-48 and col. 6, lines 43-53). The claimed sending said response information to said response information receiving equipment is also met by the DHVT 14, which may

uplink information over to the AMI 22 as shown in Fig. 1 (see col. 2, lines 51-65 and col. 3, lines 5-19). The DHVT or “communication means” also retransmits said response information to the “response information receiving equipment” or AMI 23 when communication between the television receiver and the response information receiving equipment is unsuccessful (see col. 5, line 36 – col. 6, line 53). In col. 5, line 36 – col. 6, line 53 of the Richards et al reference, the “receiver” or DHVT 14 (set-top box) receives the retrial information, or data contained in the broadcast data used for retransmitting said response information according to said retrial information when communication with said response information receiving equipment is unsuccessful, from the Administration and Maintenance Interface (AMI 23), which sends to the DHVT a particular back-off array used for controlling the DHVT’s attempts and reattempts in successfully sending messages without collision with other messages from other subscribers using the communication line (18, 20, 22, see Fig. 1 and col. 2, lines 51-65).

As to claim 71, the Richards et al reference discloses a recording medium for storing a program as met by the ROM 42 that has the boot program 43 (col. 5, lines 35-48) that performs all of the claimed processing which is met as described in the system/receiver claims previously described above (e.g. claims 40 and 56).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 42, 51, 53 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al.

As to claims 42 and 59, the Richards et al reference discloses the claimed television and data receiver as described above in claims 40 and 56 respectively. The Richards et al reference does not specifically disclose determination as to whether or not to make retrial transmission is made on basis of transmission end time provided by the broadcasting device. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to allow only a limited time period for some types of retrial transmissions to occur for the advantage of not allowing a receiver to send a response to an interactive broadcast once a window of interaction time period has expired. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to allow only a limited time period for some types of retrial transmissions to occur for the advantage given above.

As to claim 51, the Richards et al reference discloses the claimed television receiver as described above in claim 49. The Richards et al reference does not specifically disclose that a history of communications with said response information receiving equipment is stored in memory, and notification data is generated. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to automatically create and maintain communication logs or histories of successful or failed communications with the receiving equipment and to generate appropriate notification data accordingly. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time

of the invention to have a history of communications with said response information receiving equipment stored in memory, and generate notification data for the advantages given above.

As to claim 53, the Richards et al reference discloses the claimed television receiver as described above in claim 52. The Richards et al reference does not specifically disclose editing means for editing said response information when an edit instruction is sent from a user. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to have editing means for editing response information when an edit instruction is sent from a user for the advantages of allowing a user to change the information that is going to be sent to the information receiving equipment and giving the user more versatility in communicating messages for transmission. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to include editing means for editing said response information when an edit instruction is sent from a user for the advantages given above.

6. Claims 43, 47 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al., in view of Corrigan et al (USPN 5,966,636), both cited by the Examiner.

As to claims 43 and 60, the Richards et al reference discloses the claimed television and data receiver as described above in claims 40 and 56 respectively. The Richards et al reference does not specifically disclose detection means for detecting causes of non-establishment of communications with said response information receiving equipment. The Corrigan et al reference teaches the claimed detection means for detecting causes of non-establishment of communications with said response information receiving equipment as described in col. 11,

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lines 48-53, where if the number of retries has been exceeded a message will be sent stating the cause for the access failure. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the data receiver of Richards et al with the error detection means of Corrigan et al for the advantage of notifying users of potential causes of the failed communication attempts. One of ordinary skill in the art would have been led to make such a modification since it would be beneficial to incorporate error detection means into the data receiver system for locating the causes of communication failures.

As to claim 47, Corrigan further discloses the claimed notification data is generated for making notification of said detected cause by sending a message stating the cause of the access failure (col. 11, lines 50-53).

7. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al., in view of Corrigan et al, in further view of Lowell (USPN 6,012,086), all cited by the Examiner.

As to claim 44, the Richards and Corrigan references disclose the claimed television receiver as described above in claim 43. The Richards and Corrigan references do not explicitly disclose retrial condition alteration means for altering conditions for subsequent retrial transmissions from the next time on, on the basis of the cause detected. Lowell teaches that alternate phone numbers or sources may be used to connect based on errors in attempting to connect to the source server (see col. 7, lines 8-25 and col. 8, lines 15-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the television receivers of Richards and Corrigan with the retrial condition alteration

means for altering conditions for retrial transmissions from the next time on, on the basis of the cause detected, as disclosed by Lowell. One of ordinary skill in the art would have been led to make such a modification since it would be beneficial for the user if the receiver system automatically made attempts to alter the connection based on initial failed attempts and attempting to avoid the cause of those failed attempts.

As to claim 45, Richards discloses altering time intervals for retry attempts as previously described above, and Lowell further discloses that the retrial condition alteration means may generate notification data for altering the number of times for retrial transmissions (see col. 7, lines 10-12).

As to claim 46, Lowell further discloses that the retrial condition alteration means suspend retrial transmissions after a specified number of retry attempts have been made or if the server is down, etc... (see col. 7, lines 8-25 and col. 8, lines 15-30).

8. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gammie et al (USPN 5,270,809), in view of Richards et al, both cited by the Examiner.

As to claim 61, note the Gammie et al reference which discloses an IRD 206 and television receiver 220 (see Fig. 2). The claimed tuner for selecting a transport stream from data sent from a broadcasting source is met by tuner 304 (as shown in Fig. 3), which selects a channel from the incoming signal sent from the program broadcasting device 202 (see Figs. 2 & 3, col. 5, lines 5-9 and col. 5, line 66 – col. 6, line 3). The claimed transport decoder...and AV decoder for outputting display data of a selected service to a monitor is met by downconverter/demodulator 302 and descrambler 303 (Fig. 3). The claimed control input unit is

met by user keypad 307 as shown in Fig. 3 or a remote control for transmitting a signal to the IRD (see col. 8, lines 58-66, also see col. 6, lines 5-11 and Figs. 2 and 3). The claimed line communication unit for sending response information over a communication line...is met by modem 313 (Fig. 3). The claimed CPU is met by processor 304 and DCP 405 (see Figs. 3 and 4). The claimed memory is met by processor DCP 405, which may comprise a MC68HC11E9, which inherently comprises memory and a control program (col. 6, lines 62-65). Gammie discloses that the control program retransmits said response information via said line communication unit based on retrial information contained in the broadcast data, when communication with said response information receiving equipment is unsuccessful is met by the system operator at the broadcasting station transmitting retry information or data to the decoders that were unable to successfully call-in, where all decoders with a retry bit set by the control program should call in when a retry window is opened by the system controller (see col. 8, lines 2-4, col. 11, lines 14-19 & 50-53, and col. 12, lines 26-27). Gammie et al does not explicitly disclose the claimed, "wherein said tuner determines data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time and said control program retransmits said response information according with said retrial information when communication with said response information receiving equipment is unsuccessful." However, the Richards et al reference specifically teaches that the Set-Top Box/receiver or DVHT (Digital Video Home Terminal) 14 (col. 3, line 8), which inherently includes a tuner, "determines data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time...", as met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 to the

initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 (see col. 5, lines 42-48 and col. 6, lines 43-53). The DHVT or "communication means" also retransmits said response information to the "response information receiving equipment" or AMI 23 when communication between the television receiver and the response information receiving equipment is unsuccessful (see col. 5, line 36 – col. 6, line 53). In col. 5, line 36 – col. 6, line 53 of the Richards et al reference, the "receiver" or DHVT 14 (set-top box) receives the retrial information, or data contained in the broadcast data used for retransmitting said response information according to said retrial information when communication with said response information receiving equipment is unsuccessful, from the Administration and Maintenance Interface (AMI 23), which sends to the DHVT a particular back-off array used for controlling the DVHT's attempts and reattempts in successfully sending messages without collision with other messages from other subscribers using the communication line (18, 20, 22, see Fig. 1 and col. 2, lines 51-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the Gammie et al reference with the Richards et al reference for the advantage of having the receiver/tuner determine initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time and retransmitting the response information when communication is unsuccessful. One of ordinary skill in the art would have been led to make such a modification in order to simplify the transmission from the broadcasting device to the receivers by transmitting the information as described above at the same time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(703) 308-HELP**.

Michael W. Hoye
December 22, 2004



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600